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ROD & *Custom*

MARCH 1959

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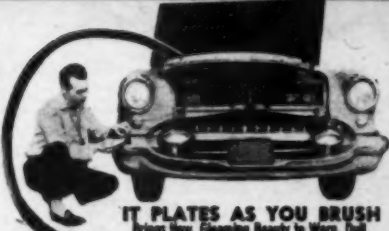
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**MARCH
1958**

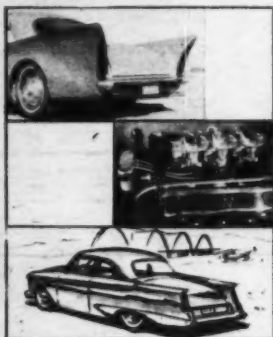
In this month's

ROD & Custom

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FEATURES



Once again Peter Sykalac provides us with a cover car. A custom to end all customs, read all about the **TROPHY TAKER**..... 10

Another year means a new crop of engines from Detroit. If you are anxious to improve one, check **HOPPING UP THE NEW V8's**..... 20

New ideas on restyling the '49-'51 Fords are still forthcoming. Here are the best yet on this fine car. **SPACE AGE STYLING FOR THE '50 FORD**.. 32

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Eastern and Western customizers had formerly only faced each other across a car show floor, but R & C had two fierce competitors in the restyling field combine their talents on the *Dream Truck*. Bob Metz (left) of Indiana and California's George Barris bury the hatchet in the above photo — and customizing as a whole benefits.

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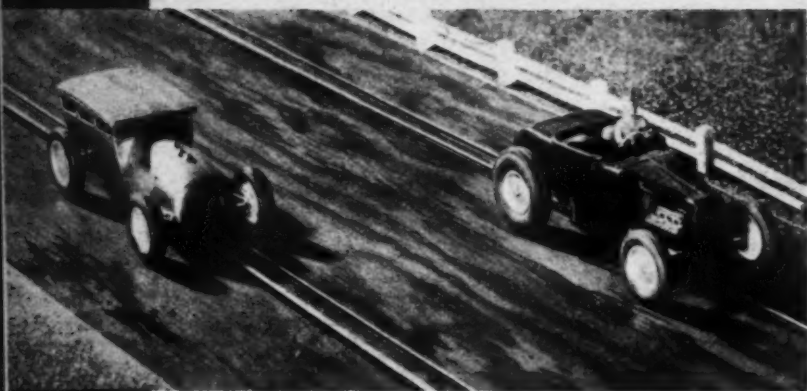
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DESPITE THE overwhelming number of professionally built custom cars featured on these pages during the past five years, it is still the amateurs' work that we get the greatest kick out of seeing. Naturally, the big shops usually (though not always) turn out a pretty good grade of *quality* work, their ideas and treatments on various styling themes have gotten pretty static. It's gotten so that anyone exposed to a professional shop's work can spot their work among even a large group of customs. For example, cars restyled by a certain emporium in, say, the Midwest might be identifiable by their headlight treatment. Certain custom Mercs, maybe, could only have come from one California shop. In short, we are lamenting the lack of really *new* ideas emanating from the professional boys 'round the country. Their quality, for the most part, remains at a generally high level, but really original ideas are sorely lacking.

But the amateurs' cars tell a different story. Here individuals work out their own themes and ideas and, not influenced by shop policies, add (or subtract) from their car's appearance in ways new to all who view the project—sometimes with good results, sometimes with bad, but it is the *trying* that is important. These lads are the ones who really deserve credit for starting new trends in customizing, and the chances are pretty good that an acceptable idea originating with an amateur will later turn up as the “invention” of a professional shop.

Case in point: The beautiful Ford on our cover this month is the work of a professional metalman, it is true, but since this is his first attempt at a radical custom and since the result definitely does not bear the influence of past customizing trends, it can be looked upon as an amateur's attempt. Builder Ron Courtney—and this is important—does not rely upon stripes, flames or scallops to emphasize the fine lines of his car; instead he lets the car's sheer good looks do all the talking—and what a masterful job! Our fervent hope is that his thoughts are picked up by restylers from coast to coast—and in so doing perhaps we will eventually be rid of the wildly painted, gaudily striped, atrociously scalloped cars currently haunting (literally) the drive-in scene. Are you with us?

We've compiled four whole pages of Readers Cars—and there's quite a variety of makes and models represented. For complete enlightenment, check page 38. ●

S.M.

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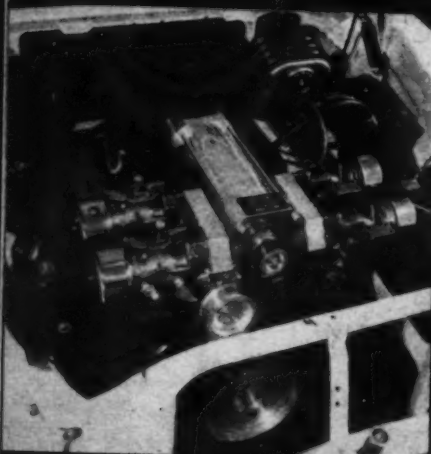
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Bell Auto Parts at 3633 Gage Ave. in Bell, California, have the answer for '39-'48 Ford and Mercury owners. Polished aluminum air scoops permit safer driving by reducing brake fade and providing longer brake life. Simple installation keynotes an item that goes for \$9.00 a pair.



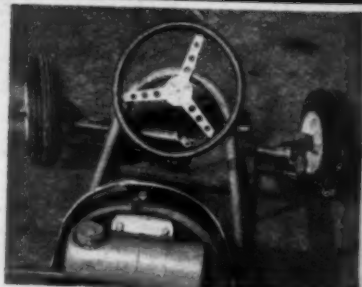
Go Kart Manufacturing Co., at 152 East Huntington Dr., in Monrovia, Calif., is announcing accessories for their cars, beginning with the illustrated steering wheel. With chrome moly spokes, wrapped with sure-grip tape and drilled for lightness, it duplicates big car wheels in every way but size. Also available are upholstered seats, 6" wheels with 12" tires for twin-engined cars, and brand new McCulloch engines converted to run in opposite direction to be added to present single engine cars to double its power.

8

The Latham Mfg. Co., P.O. Box 165 at West Palm Beach, Florida, is justifiably proud of their line of axial flow superchargers which feature highest quality materials and construction. A vast line of blowers allows for easy installation for every popular make and model, both for street and competition use. Latham-equipped cars took both first and second places in the hotly contested A/Gas class at the '57 National Championship Drags using a blower similar to the Chrysler unit at the left.



Mean Automotive at 10820 S. Norwalk Blvd., in Santa Fe Springs, Calif., has added to their long list of quality merchandise, the 2-cycle McCulloch engine shown here. These engines are those used on the popular 42" wheelbase cars, its 2.3 horsepower capable of powering the car as fast as 40 miles per hour. Engine is entirely complete, including gas tank and clutch. Absolutely ready to run. A good buy at \$39.50.



ROD & CUSTOM

OUR READERS WRITE—or wrong

AUBURN LOVER

I'm interested in finding an Auburn of about '29 or '30 vintage. I don't want to spend a lot of cash for it, however. If any of your readers happen to know where I could pick one up in at least fair condition, it would be appreciated greatly. Thanks for the fine magazine each month—keep 'em coming.

S. E. Brigham 1244 Ada Street
Owosso, Michigan

• *If you're looking for a Model 851 Speedster, then you've chosen a tough nut to crack—at least in the interests of economy. However, our readers seem especially helpful in cases like these for they've turned up some mighty weird things. We'll keep our fingers crossed for you.*

PLYMOUTH, PLEASE

As an ardent lover, and staunch supporter, of any and all model Plymouths, I took great pleasure in seeing your collection of customs in the February edition. Can't say I go along with some of the customizing tricks the various owners employed, but it is at least refreshing to see a really good car come into popularity as it is at last doing.

J. W. McGraw Seattle, Wash.

PAINTING, AND STUFF

It's getting so that car shows are filled with only conservatively restyled cars sickeningly covered with horrible examples of "artwork", in the form of scallops and flames. Can't custom enthusiasts nowadays accomplish anything better than a lousy paint treatment? It wasn't too long ago that actual metalwork was needed to make a custom, but I'm fast losing my interest in cars and it'll soon be all gone if this craze keeps up. Can't you fellows do something to bring back true customizing?

• *Only wish we could, George. Of course, if you've gone on ahead of this page and perused the rest of the*

issue then you know our sentiments. We're praising this month's cover car to the skies—not only because of its outstanding design and the quality work accomplished by its builder, but we're proud of the fact it needs no "gimmicky" paint treatment to be attractive.

LITTLE CARS

Last month's *Readers Write* column carried several letters making reference to the little cars known variously as Go Karts, Fun Rods, etc. One of the writers, John Williamson by name, actually took offense at your coverage of the cars and related activities. As you have a habit of doing regularly, you told him off—nicely, of course, by asking him to go for a spin on the magazine's car and stating flatly that it is far from being a kid's car as the writer had inferred. Let me add that we handle the Go Karts and have sold several. The customers all say they are overjoyed with their cars and that it is indeed true that they are intended for all ages. But where is it all going to end if you start racing them in competition? The cars are for kids—and teen-agers, and grownups, and

(continued on p. 61)

IN MEMORY

The staff of Quinn Publications was deeply saddened to learn of the untimely passing of Howard Stamp, one of drag racing's foremost exponents. Howard, our regular readers will recall, had been directly responsible for several outstanding competition cars displayed in this magazine over the past several years, most notable of which was *The Dragster*—a spectacular, widely acclaimed car built during a magazine participation project in which the ultimate in drag car design was explored. Our heartfelt sympathy goes out to Howard's family, of Bakersfield, California, and to his many, many friends.



Leading contender for Top Custom of '58; m

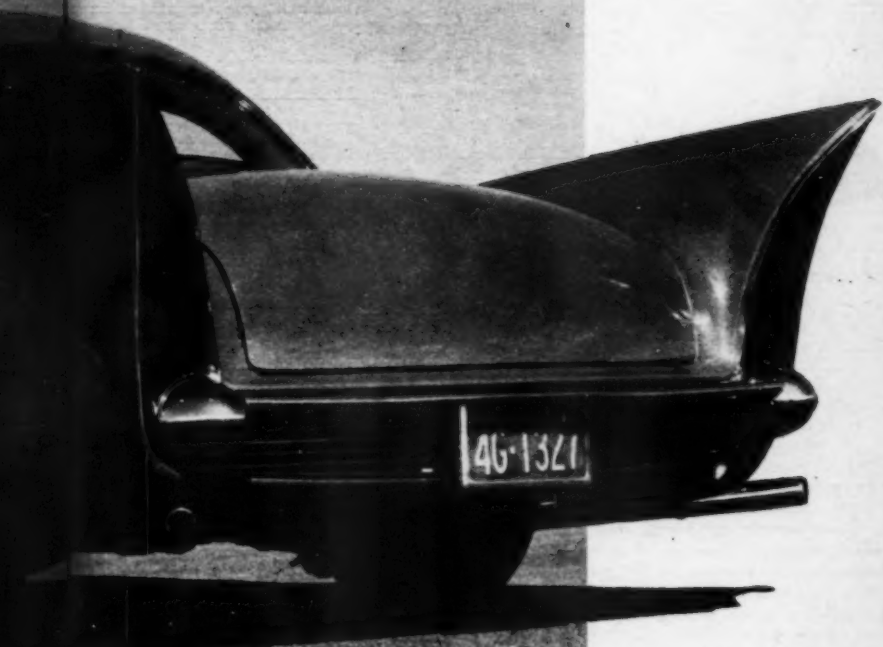


T R O P H Y

By PETER SUKALAC

rod and custom
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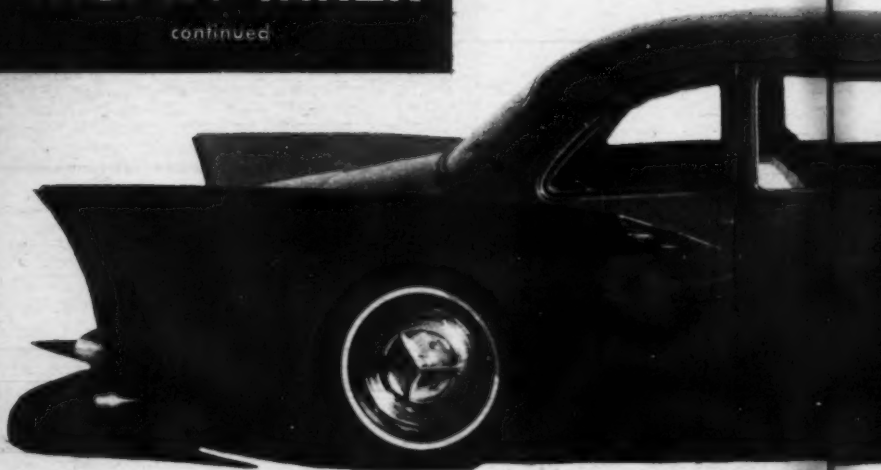
'58; meet the fabulous...



Y TAKER ▶

TROPHY TAKER

continued



IF TODAY'S show winning cars are evidence of tomorrow's trends in custom styling, then Ron Courtney has foreseen the end of striping, scalloping and other gimmicky fads. For Ron has built a car without these temporarily popular embellishments and yet walks off with all the top place trophies. At his first show, for example, he took 1st Place Custom, Best Appearing Car, Most Popular Car and the coveted Sweepstakes award. And this gold-taking was no fluke, either, for the feat was duplicated at his second show. Evidently, the finned Ford represents tomorrow's tastes in customizing.

Ron is a McMinnville, Oregon, bodyman who suddenly rebelled at our present rash of customs (?) and plunged headlong into building a '51 Ford to suit no one but himself. Fortunately blessed with foresight, design ability, and metalworking know-how, Ron ended up with a five-inch section job, pleasing fender fins and a hood with 26 lineal feet of welding in it.

Over flawlessly executed metalwork, a multi-coat lacquer job of Fiesta Red was sprayed. The car then went to Portland's Stylecraft upholstery shop — the only people to touch the car other than its owner-builder — where a tasteful interior was stitched up.

With much of the Ford's original appearance eliminated, Ron proceeded beneath the hood — with alterations to warm the heart of Chevy lovers. Yes, in place of the redoubtable flathead reposes a hefty Chevy V8 — complete with supercharger. Protuding upward from the carpeted floor is the short shift lever which actuates things within a Corvette Power Glide unit.

Ron Courtney's custom seems to us a likely candidate for Year's Top Custom. Do you agree? ●

Original deck lid was entirely reshaped to balance the design. The fins, though sheetmetal, are bonded to the quarter panels with fiberglass. Taillights are outlined with chromed strap metal, lenses are each backed with 4 lights.

The mild mannered, unassuming owner-builder of this fine Ford was genuinely surprised at his first car show when trophy time rolled 'round. He ended up taking everything from a giant, seven-foot-high Sweepstakes award on down!



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Trophy Taker's interior is tastefully finished in red and black plastic to match the Fiesta Red exterior. Upholstery was done by Stylecraft in Portland, Oregon, the only place allowed to touch the car other than owner-builder Courtney. Dash is essentially stock '51 with chrome-backed controls.

TROPHY TAKER

continued





The apparent length of the sectioned coupe is the result of thin body line, sweeping rear fender contours. The car is obviously a product of deep forethought and quality construction (evidenced by reflections in paint). Too bad some of our better-known builders can't do as well.



SO RARE...

*tidy Deuce is clean to
the point of sanitation*

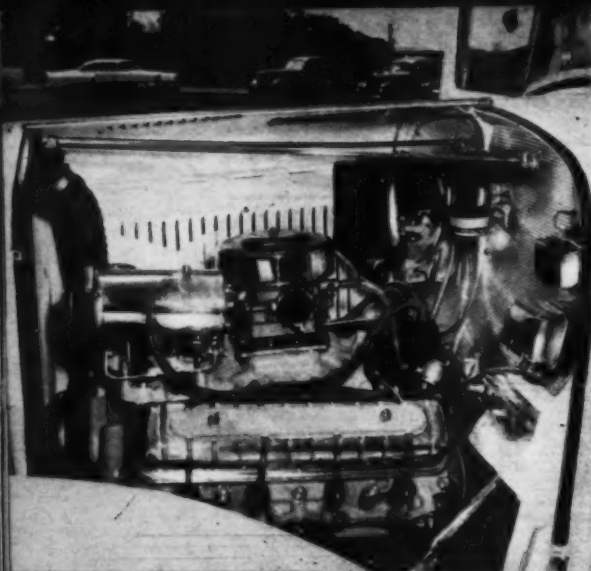


A show car of show cars, this '32 Ford coupe has an undercarriage that glistens with spotless, highly polished paint and chrome. Owned by George and Dick Collins of Whittier, Calif., the five-window coupe has chromed drive shaft, springs, radius rods. Note pleated upholstery.





By JIM POTTER



Every visible bolt and engine accessory, including special, home-made headers, gaskets with brilliant chrome. Even the firewall, battery holder, and steering column have been given special treatment. The engine itself is a '56 Olds V8, fitted with a Hildebrandt adaptor. Car took well over a year to get in tip-top shape.

Interior is faultlessly upholstered in light blue and white Naugahyde. The diamond-shaped tufted pleats are used throughout, including the headlining, kick pads, and door panels. This upholstery style also has been carried out in the trunk compartment. A dish-type steering wheel and chromed windshield and window sill moldings further luxury look.

SO RARE

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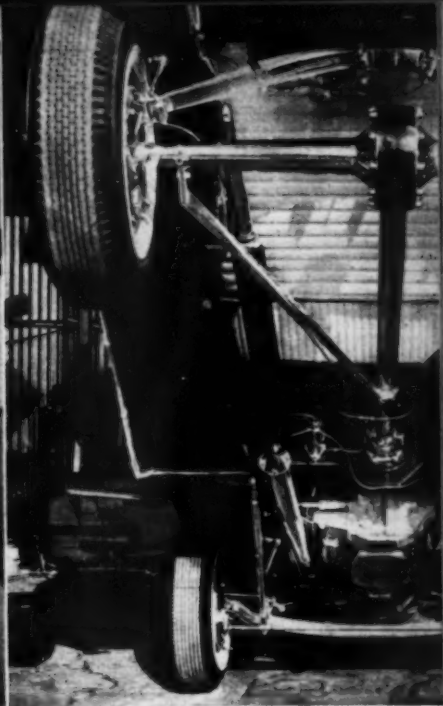
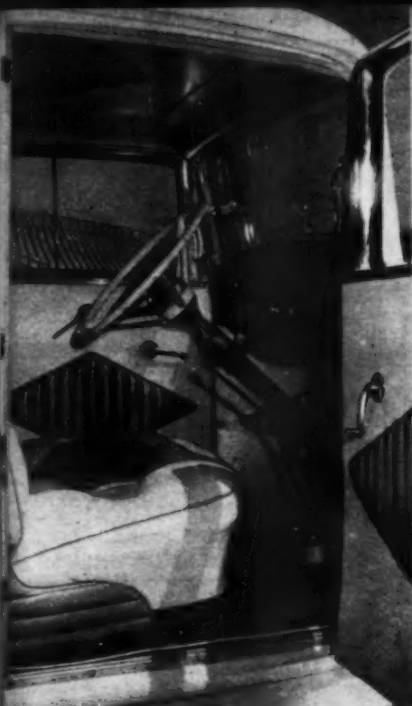
Here George Collins, left, and friend carefully go over every nook and corner of car prior to opening of a custom car show to spectators. Arriving at 8 a.m., it usually takes a minimum of three hours of spit and polish and elbow grease to prepare a car for the prize-winning cups.



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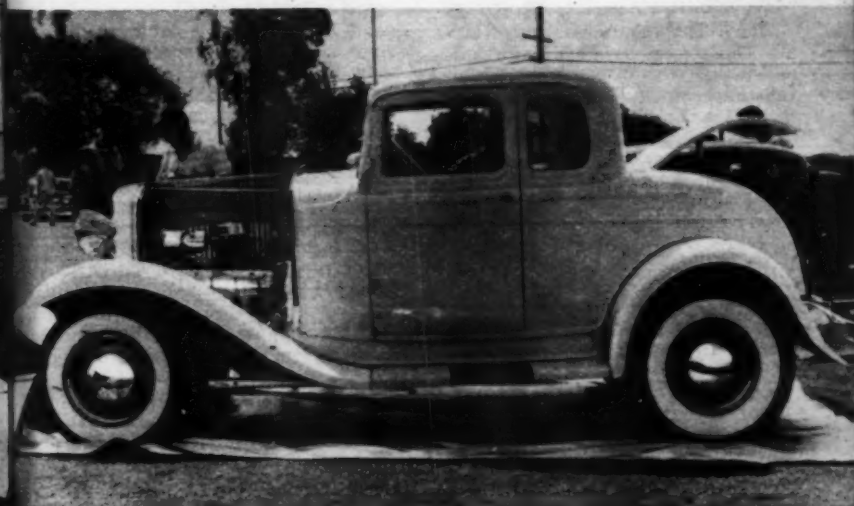
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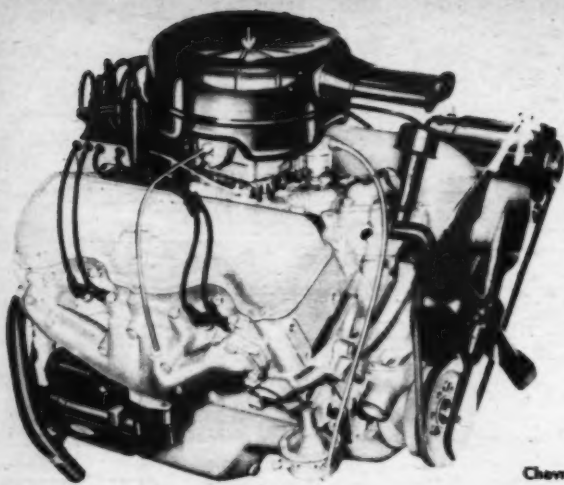
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Built almost strictly for show, Collins' coupe has won literally scores of prizes at car shows. A reflecting display "blanket" is used to show off immaculate underpinnings.

Pleated Ivory Naugahyde also is used underneath. Steering linkage, spindles, brake lines, and dual exhaust setup are completely chromed. Coupe is a rare custom indeed!





Detroit's latest improvements

Chevrolet's new 348 inch

THE HORSEPOWER race has pushed Detroit engineers into hop-up tricks on passenger car engines that would have been considered impossible five or six years ago. Most late stock engines produce as much horsepower and torque *per cubic inch* as "full-race" modified engines of those days. By the same token it's getting tougher for the backyard mechanic — to speed equipment suppliers — to improve on factory performance with their special cams, manifolds, etc.

Has this discouraged 'em? Not at all. The hop-up boys are more determined than ever to develop and maintain superior road performance for their cars. Each new basic engine out of Detroit is studied carefully to spot weaknesses that can be improved, and to find the strong points that can be bled for just a bit more. There may be more possibilities than you think. Editor Murray has asked me to take a look at the four new '58 engines (the two from Ford, and one each from Chevrolet and Chrysler). Here's how they stack up from the standpoint of the backyard modifier...

CHEVROLET

This is the most interesting of the new engines because it's going to be compared all the time with the fabu-

lous performance of the little '55-'57 Chev V-8. Not only would the earlier engine put out more honest hp per cubic inch than any other V-8 in the business, but it was smaller and lighter than any of the others. It's a tough combo to improve on. Size and weight-wise, the new 348-cu. in. job is no improvement. It's 2.7 inches wider, 1.8 inches longer, .8 inches lower in height, and weighs 80 to 90 lbs. more (around 625 lbs. dry). It is not similar in size and weight to other V-8 engines in the low-price field. But don't get discouraged. Remember, they have added 65 cu. in. and gobs of torque. Also, we considered the Buick V-8 engine as being light and compact four years ago; this is no larger or heavier than that.

Performance is largely an unknown factor at this early date. (We can't take much stock in advertised power and torque figures.) We were, however, able to put a standard Turbo-Thrust sedan on the drag strip the other day. It was fresh off the showroom floor, no special tuning, had the heavy air suspension setup, and the Powerglide trans. It managed an e.t. of 17.02 and a trap speed of 80.33 mph. My performance graphs suggest an actual 180 hp was working at the flywheel to get this performance with this weight

by Roger Huntington, SAE

**crop of bent-eights can stand some tried-and-true
— but some new innovations are necessary, too.**

(the engine is rated at 250 hp). The factory claims 210 hp at 4400 rpm for this engine when installed in the car. I can't see it. From the evidence I would have no doubt that the new engine can ever approach the old one in hp per cubic inch; but maybe by adding brute inches you can get more absolute performance, regardless of size and weight. Incidentally, the only factory power option on this engine is triple 2-throat carburetion, available for \$140. They claim an extra 25 hp for this setup when installed in the car. Seems high... but, if it's true, it would be well worth the money.

The valve gear on the new engine is very similar to the 283 (stamped ball-joint rockers, tubular pushrods, etc.). This gear is light in weight, and is quite stiff for its weight—so this engine should wind comfortably to at least 6200-6500 rpm with solid lifters and the right cam. The speed shops should be out with the necessary equipment soon. The valves are staggered along the head length, and diameters are quite generous (1.95" intakes and 1.66" exhausts). There's room for

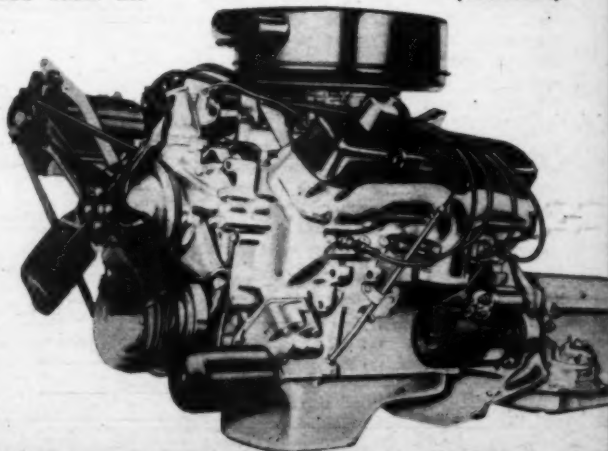
larger ones, though, and it never hurts to have more breathing area per cubic inch. You should be able to fit in $\frac{1}{8}$ " larger intakes and $\frac{1}{16}$ to $\frac{1}{32}$ " larger exhausts.

The unique combustion chamber in the block will pose special problems for the souper. The heads cannot be milled to increase compression ratio; the only practical way to do it would be with specially-contoured piston tops. These should be available by the time this reaches print. I would think about 10.5:1 ratio would be plenty. Cylinder wall thickness and rod clearance would appear to permit safe bore and stroke increases of $\frac{1}{8}$ " and maybe $\frac{1}{16}$ " respectively. That would give 419 cu. in., and maybe a power potential on gas of 375 hp at 6000 rpm.

Good enough??

CHRYSLER

The Chrysler Corp. dome-head double-rocker-shaft engines have usually been the first choice of the all-out competition man for years. They're big and heavy, but you can't beat the
(continued)



New Chrysler engine has gone back to the old type wedge shape combustion chamber. Stamped rocker arms might be key to very high rpm's.

HOPPING UP THE NEW V-8's continued

breathing of this valve and port layout; also the compact combustion chamber makes it a little easier to handle nitro fuels. Unfortunately, the things just cost too much to build. The new '58 Chrysler V-8 (used in Plymouth, Dodge, and DeSoto models) is back on the old wedge-type combustion chamber with inline valves on a single rocker shaft. The port layout is not so good, and potential valve area per cubic inch is not as great...so this new basic engine just cannot be expected to yield as much hp per cu. in. as the old dome-head jobs.

Redeeming features are that the new engine is lighter (630 lbs.) and smaller, the parts should be cheaper, it has plenty of cubic inch potential, and the new combustion chamber will allow higher compression on a given fuel octane. For instance, a .050" head mill would give a compression ratio of about 11:1 — which should work very nicely on premium pump gas of 100 octane. Cylinder wall thickness and rod clearance would appear to allow a bore increase of $\frac{1}{8}$ " or so, and at least $\frac{1}{8}$ " stroke increase. On the 361 block this would give a total of 426 cu. in. It would seem that an ultimate potential on gas at this displacement should be at least 350 hp. (This refers to *actual* hp at the clutch on the road.)

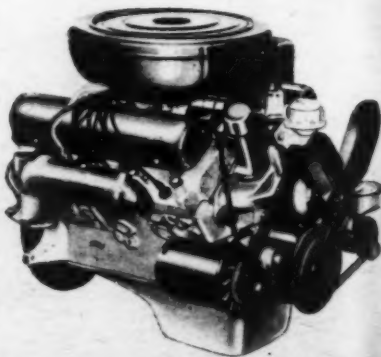
Optional factory dual quad carburetion, fuel injection, and a high-performance camshaft (with hydraulic lifters) are available. And, of course, a few suppliers will be out with additional equipment in a matter of weeks. At first glance it looks like the light stamped sheet metal rocker arms might give the new Chrysler engine virtually as much rpm potential as the Chevys. Actually the heavy solid pushrods are bound to hold this down. Light tubular pushrods and solid lifters should be the first order of business when you

go to work on this engine. The factory high-performance cam has 260° duration, and would appear to be much inferior to the hot California sticks. This would be a good change. Exhaust valves are only 1.60" head diameter; there's room for at least $\frac{1}{8}$ " more diameter here — even if you put in intakes over 2". And finally: The factory "log"-type dual quad manifolds are not noted for their throttle response and economy around town. Triple 2-throat carburetion, when available, should be better.

SMALL FORD

This is the engine that is used in all Fords and junior Edsels for '58 — in displacements of 332, 352, and 361 cu. in. In size and weight it is very close to the former Ford-Mercury engine used from '54 through '57 (in displacements from 239 to 312 cu. in.). In fact, much of the earlier tooling has been adapted to produce the new engine. This is why it wasn't practical to use the new block wedge combustion chamber, where the block faces are cut off at an angle less than 45° from horizontal and the chamber is formed between the cylinder wall and contoured piston top. (This layout is used on the larger Ford engine.)

However, there is one important feature of the conventional cylinder head wedge chamber on the new engine: It is fully *machined* to a smooth surface.

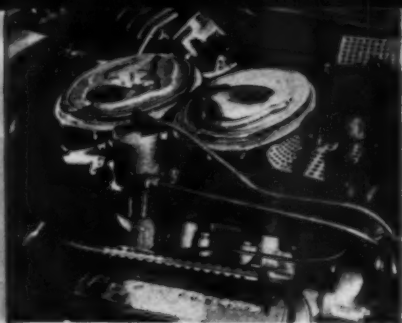


Ford's V8 is offered in three sizes: 332, 352 and 361 cubic inches. New head design permits machined chambers.

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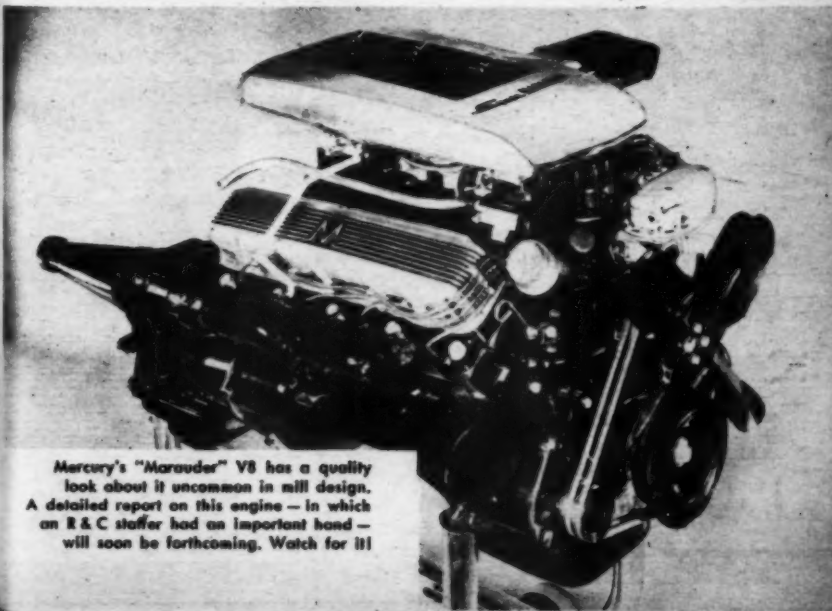
Late reports put the fuel-injected Chrysler 300-D engine up to 390 hp. Gobs of chrome give potent engine "handbuilt" look of showy hot rods.

This should help control pre-ignition caused by carbon and lead deposits, and it will allow closer production control of compression ratio between cylinders to give a smoother-running engine. (As compression goes up the relative chamber volume goes down, so it's harder to keep the ratios even.) And, of course, the head wedge also leaves the possibility of milling for higher compression. But since compression ratio is already 10.5:1, I would not take off more than .030" or so. Also the piston-valve clearance is close here, so be careful of this when milling (it should never be less than .050").

This new Ford engine has 2.03" intake valves with a lift of .401" - so it

has more breathing area per cubic inch than any of the other new engines. But the exhaust diameter of 1.56" could stand to be increased $\frac{3}{32}$ " or so. (Finding oversize valves is generally a matter of searching spec tables on production valves to find a model of the required head and stem diameter; then rework the tips to accept your stock keepers.) The head ports are also quite large, but these should be smoothed with a grinder when you do your head work. The valve gear is not so promising. The heavy cast rocker arms and solid pushrods will limit usable rpm severely; it is doubtful if the engine

(continued on page 62)



Mercury's "Marauder" V8 has a quality look about it uncommon in mill design. A detailed report on this engine - in which an R & C staffer had an important hand - will soon be forthcoming. Watch for it!

the clean, cool



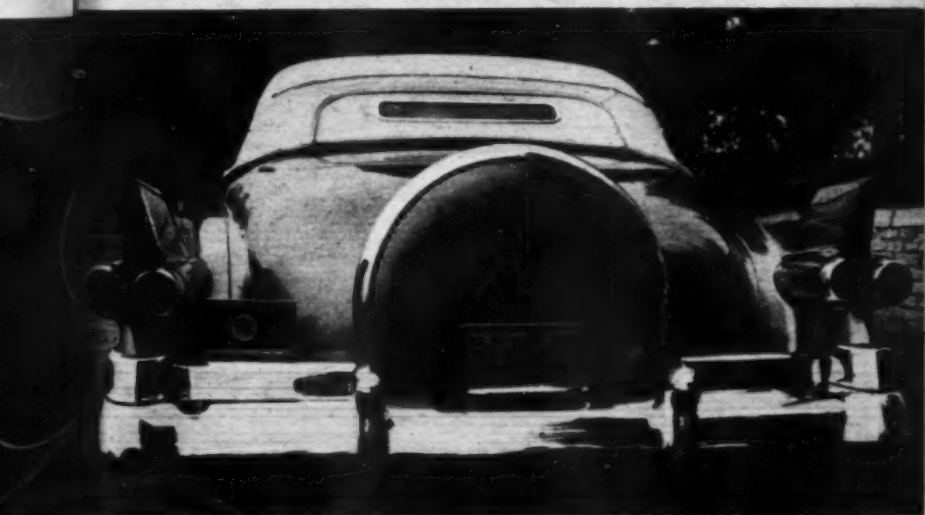
LOOKS CAN certainly fool, as would-be stop sign drag fans can attest who might have met up with Tony Alves and his big Cad on the streets of San Jose, California. For beneath the scallop-painted hood of the 5,400 lb. custom nestles a full-house Eldorado engine—fairly bristling with its 425 cubic inches and estimated power output of some 375 horses. But then, maybe it's the standard shift transmission which aids the Getz-geared convertible. But whatever—it storms.

Tony had wanted the individualism offered by a one-of-a-kind custom but the comfort afforded only by a big car—so a restyled Cadillac was the only way out. Though it started life as “just another” ragtop, back in 1950, the Standard of the World now finds trophy taking easy pickin's. ●

ol cad



By GEORGE BURNLEY





Photos by Seindorff



THOUGH IT has not been generally known until now, Bruce Geisler's pickup was the basis for the famed R & C Dream Truck. This 1949 ½-ton, originally built and owned by Los Angeles' Ayala Custom Shop, appeared a good many years ago in the old Hop Up Magazine—photographs therefrom being cut with scissors and the pieces re-assembled and pasted down. This is an old customizing trick used in determining proportions, cut lines, etc., before beginning actual metalwork. These photos, then, served as a starting point for our designers.

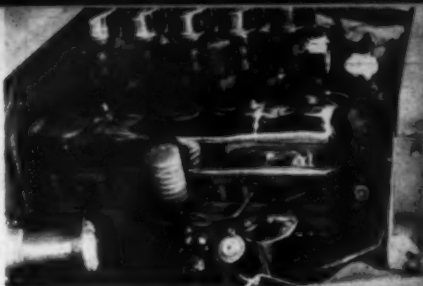
The GMC hauler lay long neglected until present-owner Geisler grabbed it and both restored and restyled it until its present fine condition was reached. Biggest change was to the powerplant, the GMC 6 being retained but hopped to the limit. Power reaches terra firma via a '38 Chev floorshift box.

The trouble with the whole thing, though, is that the pickup had been purchased for general "running around" to save wear and tear on a semi-custom Fordmobile. Now it is almost too nice to use, so Bruce is looking for another one "... and leave it alone". Oh, yeah? ●

HIGH



Truck was first customized back in 1952. Beneath the filled hood reposes a 5-carb GMC engine with such internal goodies as Howard cam, 9 $\frac{3}{4}$ -1 head and a port and-relieve job. Visible are the Howard manifold, Mallory igniter, Fenton headers. Externally, taillights are '49 Merc, the tailgate is paneled over, the headlights are french-ed, square-tube bumper added at rear. Though built several years ago, the hauler is still a strong contender at local car shows.



GMC pickup served as starting point for the R & C Dream Truck — but not even the owner knew it, until now!

H STYLE HAULER





HAD I KNOWN—that fateful morning my girl, Gertrude Geester, drove her stock, '60 Ford Sedan into my little shop—I was on the brink of the most horrendous adventure yet to be encountered in my crummy life, I think I would've flipped on the spot.

I, Kempper Klukkoop, am a cool-headed-type guy whose calm, detached attitude made it possible for me to bring my talents to the car customizing field, and whose easygoing, unworried outlook has made my business, **KLUBKOOP'S CHOP SHOP**, a galloping venture even though my modest premises (a reconverted Real Estate Office with a specially partitioned ex-phone-booth for my private office) indicate that I am, professionally, a newcomer to the vast, growing industry of revamping and improving car designs.

Nevertheless, I'm raking in my share of the bread.

I was in my office, tabulating the billing for a job just completed (making a '40 Cad look like a *Triumph*

with glandular trouble. Cost: \$2.13 for parts, \$11,395 for labor and a token charge of \$1000 for knowhow), when in tools Gert—leaning on the horn.

"*I hear you, already!*" I shouted, racing to her and romantically nibbling upon her hairy paw in the best continental manner. "Get the heck off the klaxon, doll!"

Gert put a well-muscled arm around my neck and passionately drew me to her. The gentle crackling of my upper spinal column was proof of her regard for my manly charm as she held me one brief moment before letting me drop to the garage floor, limp with love and lack of air.

"Honeyboy," crooned Gert, climbing out of the car, "I want you should make your little old sweetie the most happy girl in the world!"

"Oh, Gert!" I murmured, blushing furiously, "Not here! Not right here in the garage! Besides, I got a job just about due to arrive." I winked roguishly. "Business before pleasure

LUBKOOOP'S WEEK of KUSTOM WOE

By CARL KOHLER

(author of: "The Lost Art Of Restyling Dump Trucks")

The gentle crackling of my upper spinal column was proof of her regard for my manly charms as she held me one brief moment before letting me drop to the garage floor, limp with love — and the lack of air.

and all that proverbial jazz, you know!"

Gert's leer set into a determined grimace.

"I mean, honeypot, I want you should customize my car! You're such a clever, talented little creep — I know you can do *wonders* with my car and make it into a stinkin' breathgrabbing marvel. I'm sick — *sick*, do ya hear? — of being seen driving this old thing around town! I want you to do things to it. I want you should recreate it into something that fits my personality!"

"B-But, Dollbaby —" I protested.

Gert reached out, smiling a pure-steel smile, and took my biceps in her hand. "You aren't going to disappoint your sweetsie, are you, jerkboy?" She tightened her grip and my arm went numb. "You want we should split-up just because you're gonna be stupid about customizing your sweetsie's kemp?"

"Of course not!" I said hoarsely.

"Crazy, sugarbun!" Gert yapped

cheerfully. "I'll be by, tomorrow, to pick it up!"

"Tomorrow! Now, listen —" I yammered.

"Tomorrow," she snarled firmly, sauntering out of the shop and thumbing a ride down the highway.

I crept into my alleged office and slumped behind the orange crate I call a desk. This nauseous situation needed much thought. Trouble was, the more I thought about it, the more nauseous it seemed.

There are those who claim Gertrude Geester is a fat witch with piano legs, the makings of a fine moustache and possessing the obnoxiousness of an irritated cobra. I have never seen her in this light. To me, Gertrude Geester is the robust daughter of Sam Geester The Junkyard King. And, since going steady with Gert, I have enjoyed a free, unlimited supply of automotive body-parts which have saved me all kinds of money.

(continued)

KLUBKOOP'S WEEK OF KUSTOM WOE continued

"The whole picture," I informed myself realistically, "is simply this: If I don't fix up her car, I lose a nice gratis supply of material and probably get pulverized in the bargain. How can I refuse?"

I'm not a guy who argues with logic. For the rest of that day, all that night and half the following morning I worked at customizing her stock Ford. I channeled it. I chopped it. I installed a tasty '55 Dodge grille. I hooded the headlights. I hooded the taillights. I stuck chromed nerf-bars fore and aft. And, at last, I collapsed—staring admiringly at what I'd done: the effects completely changing what had been a dull, standard Ford Sedan.

Then, Gert arrived.

"Well, doll—" I began happily.

"Jeezely," she muttered, "what did 'ja do to my car?"

"Why, I merely—"

"It stinks, whatever ya did, jerkboy!" Gert turned a broad face of wrath upon me. "You just better get the lead out and—"

"B-But, doll!" I wailed, "I haven't leaded any part of—"

"—start getting this mess into shape!" she raged. "All I can say, is, it's gonna be too bad for certain people, named Klubkoop, if this piece of junk ain't a real cool kemp by tomorrow!"

"Tomorrow . . . again?" I moaned, dropping my head into my hands. "Cheez . . . all over again?"

"Tomorrow, jerkboy!" she hissed and departed.

The following twenty-four hours were a concentrated melee of intense effort to reshape the Ford into some kind of bizarre style that might satisfy (if not actually please) the haughty Gertrude. Other (paying) customers arrived, were declined and drove away—taking all their good, American money with them. I worked on, ever on, with a broken heart; by me, it's a tragedy to lose a client.

Came the dawn and even a myopic cretin could see that some mighty advanced restyling had been incorporated into what had been a stock Ford sedan.

Now it was a handmade Thunderbird with mild overtones of a Jaguar, a Volvo and the dignity found only among 1928 Whippets. In short, a dilly.

Gert arrived.

Gert stared.

Gert gasped.

"YOU CALL THAT LOUSY LITTLE BUCKET MY CAR?" Her howl of fury reverberated throughout the garage. "I'M GONNA GIVE YOU EXACTLY UNTIL THE END OF THIS WEEK, JERKBOY, TO CUSTOMIZE MY WONDERFUL CAR WHAT I'VE HAD SINCE I GOT OUT OF HIGH SCHOOL!"

When my head stopped ringing I realized I had about three more days in which to save my furshlugginer life. It was either make another try—or spend the rest of my life hiding out in various aircraft factories, always living in the fear The Geesters might find me. I chose risking life, limb and a once-thriving shop because I'm a type-guy who would rather bleed to death all at one time rather than blanch fearfully everytime somebody addressed me as Honeyypot, which happens often—me being an attractive chump to the dolly faction.

"Yeh," I growled at my battered, exhausted image in the discolored mirror of the shop's biddyboo-room. "You had to play it wiseguy-style and get'cher self a babe with a tough old man who runs a junkyard—and her with more muscle than a horde of Vic Tanny graduates!" Noting the lines of starvation, around my swollen mouth, I cut out for *The Hoist*, a local cafe, where I decided to have a hearty meal before making my final bid for survival.

I had just finished chomping my way past the steaks and greenery and was

... a shrewd cat named Doodles Miller, noted from Here to There for wobbly-lined cuto cartoons. A character—smart character.

preparing to scoff into the pie and ice cream section when who slides onto the stool next to me but this old buddy of mine — a shrewd cat named Doodles Millar, noted from Here to There for his wobbly-lined auto cartoons. A character, but such a smart character.

"You look like you lost, man!" burred Millar, grinning into my beat up features. "Have you started a price war or something, Kemper old Kid?"

"Go ahead — laugh all over me!" I murmured bitterly. "You aren't facing a problem nightmarish enough to give a psychiatrist the twitching-jumps."

"It's that bad?" he inquired sympathetically.

I gave him the whole story. I detailed it for him in terms any village idiot could have clearly understood. When I had finished yammering my tale of worry, anguish and triple-tread woe, Millar began drawing little pictures with the handle of a spoon, in the puddles of spilled coffee on the counter. After a couple of minutes of thoughtful-looking silence, he leaned over and whispered a suggestion into my ear. It was the nuttiest thing I ever heard. It was exactly the kind of idea you would expect to hear from a cartoonist.

"You think that might work?" I asked.

"Well," chuckled Millar, getting up to leave. "If it doesn't, you're going to be just as dead as if something else didn't work! Anyway, with a little

luck you should be able to have it done in the next three days."

I lit out for the shop.

Three days later, three labor-ridden, hour-heavy days later, I finished spraying the last of 42 coats of *Kwik-Dri Kar Krud* (one of those new enamels guaranteed to withstand sleet, sand, pocket-knives, acid and tobacco juice), in a pale pink color, on the Ford — and stood ready to survive or perish on the results of a 72-hour work-jag the like of which probably has not been known to mankind since the wheel was invented.

Gert arrived right on time.

"*Honeypan!*" she screeched joyfully, "*It's terrific! It's wunnerful! Sensational! It's just exactly the way I wanted it!*" Gertrude Geester grabbed me and held me passionately (until my backbone creaked) in her strong arms. Which was just as well, since I nearly fainted in pure relief... especially, when you consider that I had only *re-build her darned Ford back to its stock lines*, put a garish baby-blue interior of unborn, dyed ratskin inside the sedan and (not to overlook the quilted-overhead of laminated, polka-dot acersucker) finished the entire monstrosity by slathering a lot of pink paint all over the body. I even chipped the chrome off the bumpers to match the way they were when she first brought the car to me. And she loved every rotten detail of it! (continued on p. 59)



SPACE AGE STYLING for the 'fifty ford

Henry's mid-century line shows its ability to breast if not beat the new stuff from Detroit

In making the '50 Ford so contemporary we must change its elemental static design toward one of futuristic "forward in motion." This is a need, for they symbolize the new Middle Age, but they need not be overemphasized.

Lowering and extending the overall length will decide what it has an ungainly box. For this, a slight sectioning of the body will help, as will adding a foot to the rear by an adoption of the '54 Chrysler tail motif. Vertical lines are formed at red glassless. The vertical height of the rear deck is minimized by creating a shadow box beneath

its rear lower edge which is chrome flamed and houses the license plate on a background of brushed, ribbed aluminum.

The graceful side moldings which intensify the boxed look are '53 Pontiac, reversed. These effectively break up the flat side panels. The lower chrome panels that surround and form the rear wheel covers are cut from '55 Lincoln rear quarters, raised, plated and beaded in place.

Headlights are Imperial speed's and the grille is from the same car. Main hubcaps of the century type keep the feeling of simplicity.

A. P. Hayes



Ken Hayes brings his experience in the field of illustration to focus on the '50 Ford after concentrating on Rockets and missiles for the past several years. Display work for the missile manufacturers has been his long suit also. Although not primarily an auto enthusiast, Ken shows that a feeling for design can be an asset in any field, cars, satellites or what have you.

Sidelining the Ford is the only way to obtain proper proportions for a contemporary custom of this popular model. Although somewhat on the radical side, a full 6" is removed from the waist. Rear fender panels are '57-B Imperial, running fully to the leading edge of the door panel. The club coupe was selected as it has the most pleasing

Graphics editor Lynn Wineland admits to being in some "fast company" in our Off the Sketchpad series, but attempts to keep pace with the guest stylists in this version of the '57.

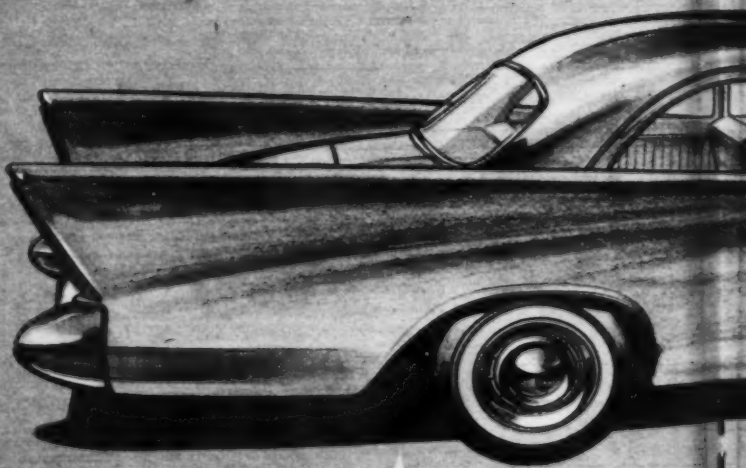


and adaptable proportions and balance of glass area, but any model could be used. The only modification to the top is the addition of the sun visor to its forward edge, detracting from the vee windshield. Wheel extents are radiused to a teardrop shape. The higher than stock rear fin-der's suitably conceal that the deck area is overly bulbous, but up front it becomes necessary to go into more work in order to keep the hood from being higher than the front fenders. The stock hood is trimmed in front of the rear support braces and takes on the appearance of a ventilation scoop. The new hood level is several inches below it and is made using the panel from a '57 Ford hood. The new nose

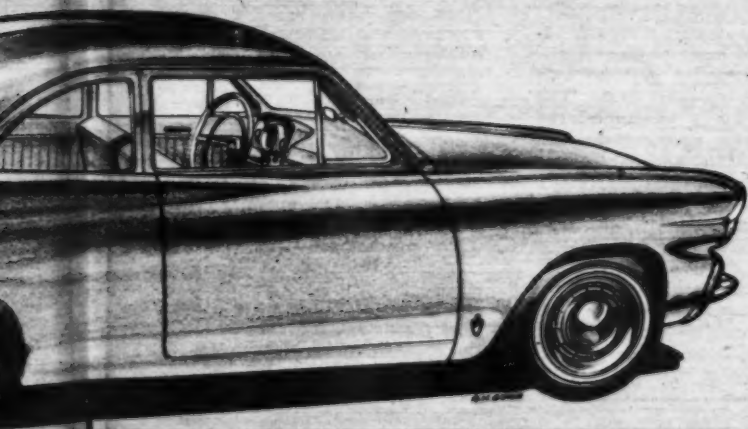
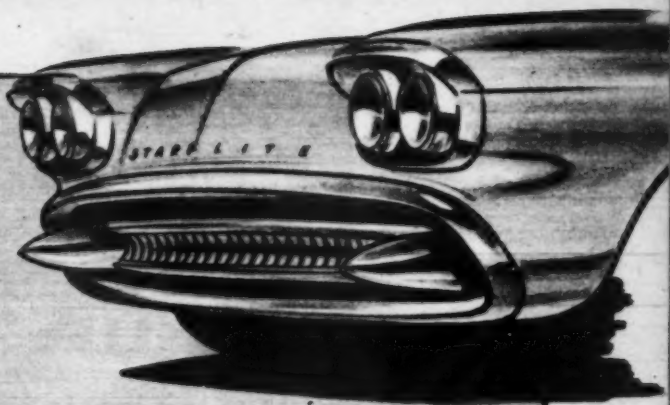
section is 6" longer than the original '50 and is formed of heavy sheet in the manner shown on pages 50-55, then plated. The grille bars are '58 Plymouth with the lower section on top, inverted. Quad lights fill in the corners. Individual bucket seats in the '58 T-bird style provide for safety and head room in the shallow machine. Lynn Wineland

SPACE AGE STYLING continued

Bob Gurr is beyond doubt one of the country's finest automobile rendering artists. A former student at Los Angeles' Art Center School, he spent time in Detroit at the Lincoln styling studio of the Ford Motor Company and with George W. Walker Industrial Design. Returning to California, Bob tried his hand at his own business and authored several books including the incomparable "Automobile Design" published by Dan Post of Arcadia, California. He is currently Director of Special Vehicle Development for Walt Disney. His experience and abilities belie his age—26!



off the sketch pad



The "StarDite" illustrated here ventures into the near future with present day components based on an eight-year old Ford. Customs need not just represent current practice, but can be advanced even ahead of contemporary production jobs. This '50 Ford coupe rests between '58 Pontiac front end sheet metal and '57 Lincoln rear fins. '55 Cad bombs are used in the built-up floating bumper suspended below '58 Pontiac quad headlight assemblies. The rear end sheet metal is reworked to meet a '49 Buick bumper. The fins start at the door on the sectioned body and have a shallow crease following the intersection of the fin and body from door to rear bumper. With the slight "windsplit" effect all of the rear wheel is cut and this fin-body crease, side highlights are well controlled and avoid any soft disrupted reflections which could ruin this design.

Bob Carr

Independently powered rear wheels work out well, eliminates expense of machining engine coupler or installing a straight-through axle. Even if one engine misfires at speed, nothing more serious than slight pull one way or the other occurs. Not having clutches, *Hustler* is started by hand pushing. Bright red car rolls on turquoise wheels. Note axle decal.



DOUBLING UP Part II

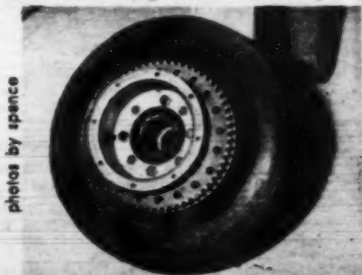
THE *HUSTLER*, introduced last month as a magazine participation project in the development of a competition Go Kart, was instigated in an attempt to get as much performance out of an under-100 lb. machine as possible. By using the standard kit as a basis, we are able to show readers the *whys* and *hows* of building a 50-plus mph car in haste without causing them to experiment on their own and thus waste valuable time. The reason for the hurry is simple: the little 42" wheelbase road runners are so doggedly much fun and so economical (averaging only a little over \$100) that no one wants to spend precious riding time experimenting on their own. But, now for Part II on the project at hand.

In last month's installment we covered the reasons for altering the standard steering system, lowering the chassis for improved cornering and the reasons for having the rear wheels independently powered rather than coupled together.

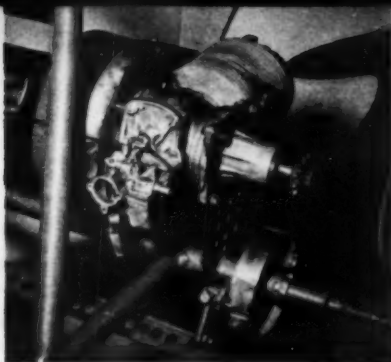
Biggest question, no doubt, will be from those wondering how an engine can be made to run in the opposite direction—as is obviously needed since the right hand engine has been turned over so that the nose of its output shaft protrudes above the wheel sprocket. Simple: the Go Kart people, at 152 East Huntington Dr., in Monrovia, Calif., are making a "right-

hand" engine available at a cost only slightly above the stock item. Available too are the larger wheels, as used on *Hustler*, extra sprockets, etc. Stock engine mounts are welded to the rigid axle tube, but reversed (as shown) to receive the extra engine. Power thus rises from 2.3 hp to 4.6 hp, a sizeable increase and sufficient to make the dual-engined machine pack a real wallop.

The brakes used on our No. 11 were pirated from an older Cushman motor scooter. One is used on each rear wheel, a lone brake being sufficient to stop the car in short order, but two being used as a safety precaution and to keep the car from veering in a panic stop. Since the brakes are mechanical, some method of linkage is needed so power can be applied equally regardless of adjustment. Our setup calls for a lefthand pedal mounted on the forward corner of the frame as the photos show. A length of 5/16" steel rod was cut to fit between the two brake actuating arms. To this, for



Left-hand engine sits in stock Go Kart position upon drilled mounts. Washer welded to axle spaces new, 6" wheel in proper relation to Cushman motorscooter brake. The drilled arm running from brake lever goes to right wheel brake; pedal shaft connects at arm's center giving equal pull eliminating equalizing problem.



rigidity, was welded a piece of mild steel strap. Obviously, a pull exerted at the center of the cross-bar will cause equal tension at either end of the bar, regardless of angle—so the brake rod was fastened with a pivot bolt at the aft end, and to the pedal with a clevis. Now, both brakes are automatically applied evenly, regardless of the adjustment of the individual units. The holes in the various components were drilled in a concerted effort to reduce weight to a minimum. An estimated 4 lbs. have been drilled from the car.

Similar to the brake project just described, the carburetors have to be actuated simultaneously from a single throttle cable which runs aft from the right pedal. A detailed photo herewith reveals how this is accomplished. To the throttle arm of each tiny carburetor is brazed another arm at right

angles. A small hole drilled near the ends of the new arms allows throttle-stops to be secured pivotally. Piano, or other equally stout, wire is threaded through the cable holes in each throttle stop and secured down with the set screw. Adjustment is made by tightening one screw, placing the throttle full-open, then tightening the other end down with its throttle similarly wide open. The cable running from the foot pedal is attached just as in the stock car.

Other changes required were, another outlet in the base of the fuel tank and enlarging of needle-seats in the carburetors to permit use of fuel other than gasoline. Preliminary tests show promise of mighty swift speed, for while being paced by a car, a speedometer reading of 52 mph was attained. ●

Engines are harnessed by right pedal, cessation provided by pushing left pedal. An attempt was made to do away with throttle altogether and have twin, thumb-operated kill buttons on steering wheel but personal preference brought back conventional throttle. Floorboard, here removed, extends from axle back to light cross-member.

Cushman brake drum bolts to drilled sprocket which, in turn, is welded to 6" Nalpak wheel. Tire is a 12" Hal Moody (Glendale, Calif.), slick, also available with "black" tread. Next month report on Hustler's performance will be given; pacing it alongside a car has already shown indicated speed of 52 mph. Conversion of the engines to a potent racing fuel will be shown.



Readers'

OUR EDITORS, during the compilation of material for the current Out Of The 48 series, received a good many duplicate entries from each state. In fact, some states were represented by as many as ten or twelve aspirants vying for the privilege of having their car used to denote the quality of work being done "back home." Of course, each state could boast but a single car, so a good many really well thought-out, well designed cars had to be filed away. But here are a few of them in Readers' Roundup; with more on tap for future issues.

Look closely at the cars shown; chances are your make and model is featured, and with perhaps some new innovations or styling ideas. If you like 'em, try 'em; that's how today's customizing trends begin.

From LeGrange, Illinois, comes Dan Dobler's '51 Hudson Facemaker — a rarely customized car. Deserving a change in the side trim and frenched lights help to set this convert apart from its 200 brothers.



Unfortunately the Model A pickup bed sported by this 48 Plymouth coupe cannot be used for the kind of custom ideas and modifications Dick Egan's builders prefer. Coupe was restored from a complete wreck.

Better known for its stock cars, Detroit nevertheless has a few heavy-duty customizers. This Michigan custom coupe required three



' ROUNDUP

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ured,
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One of the better California entries was Gene Herman's '56 Ford. From head-on the 4-door appears at 1st glance to be an Olds, but only because the entire grille unit was used from the big GM product.



Customs were scarce in Kennewick, Washington, until Gene Raper put the final touches on his '56 Ford. Under the lowered hood lurks a Thunderbird V8 loaded to the hilt with Go-Goodies.



All the members of Woody Keller's family, down San Antonio, Texas, way, love customs — brothers, wife and kids. His own '56 Chevy sports Packard tail-lights and other exterior rework, and a potent mill.

Birmingham, Michigan, is home to Mike Pokorsky's '54 Merc. Besides evident rework, the car has a modified engine. Nowhere to see the free black wagon has taken some more than its share of ribbons and cups.



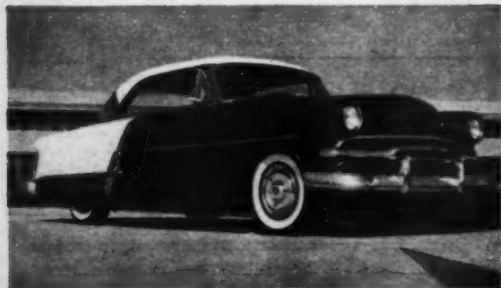
Fred H... the only custom in... North Carolina, so he is understandably proud of it. A twelve cost laborer job of Tiffin red cover quality metalwork on the...
Fred H... the only custom in... North Carolina, so he is understandably proud of it. A twelve cost laborer job of Tiffin red cover quality metalwork on the...





Though conservatively restyled, Dave Puhl's '50 Chevy copped 4 awards out of 6 shows in Chicago area. Possessing Olds, Ford and Pontiac components, coupe is GMC-powered, painted blue.

A Ranchero — the hard way, from Ft. Worth, Texas. Arthur Bowers built his custom from a wrecked '35 Ford 2-door without help from the outside. Spectators believe it to be a forerunner of the new pickup.



READERS' ROUNDUP

continued

A Ford from Fords — New Jersey, that is. Mike Dudash's '55 boasts conservative modifications, all of which nicely enhance its appearance. The powerplant beneath filled hood is a '54 Olds V8.

California's harbor city of Wilmington boasts this nifty Ford of '53 vintage, restyled by owner Bob Borges. Light blue and white paint enhance the metal modifications, Bob's wife reports to us.

Miami, Florida, is home to Joe Wilson's '34 Chevy. Three years' hard labor resulted in this eye-stopper. A Chevy Corvette V8 powers the trim little coupe and other assorted parts up-date it.

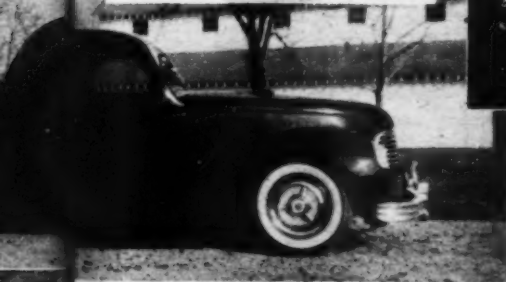


A '56 Chevy supplied the grille for Ernie Kempfmann's '51 Ford roadster. Silver and Tiffen red colors enhance the exterior of this Long Island, New York, custom. Design shows much thought.



A Tenn. owner never to be outdone, turns up with a rarely-restyled Stude — a '51 4-door. Bob Leslie's Houston Special, though conservatively done, is a head-turner what with its Chevy grille and metallic blue paint job.

Bob Stonoff's first restyling try resulted in this '36 3-window — at one time tops in popularity for customizing. Restyled '40 fenders and hood update this Bedford, Ind., Olds-powered, black coupe.



Jeff Hess' '56 Olds approach is heralded by its hood scoop, lights that are frenched and its trim-less hood. Triple carburetors assist performance of this New York car.

A loaded Chrysler V8 powers Bud Chiodini's chopped '32 Ford 1/2-ton. York Bud's coupe helped bring the Rockford, Illinois, customized pickup through three major shows with top honors in each display.



Fiberglass was the main factor in the customizing of Roy Elm's Ford. Besides using the custom for ordinary driving, Roy reports it is a fine tow car for hauling a coupe to the drag races near Fowler, Calif.



J. S. Peach says he could have slapped huge fins on his '50 Ford, but he preferred simplicity and went the conservative route. Note rounded wheel cutouts. Home is in Fort Lauderdale, Florida.

arin cee

BY PETE MILLAR





BY GEORGE BURNLEY

The 1936 Ford roadster would have been a more popular car had there been more of them made. As it is, the car is rarely seen today; those that are almost always bearing the custom touch for since the roadster's appearance late in '35 it has been a favorite for alterations. Dick Archibald's roadster embodies most of the favorite customizing tricks popular prior to World War II. The padded, chopped top; the dropped front end; the ribbed rear bumper; the Packard grille; are all old standbys. Power is by flathead.

PRE-WAR WINNER



Monterey, California, is home to Archibald Kustom Shop and the owner's roadster is rolling evidence of the shop's quality workmanship. Other than its purple paint job and engine from a '50 Merc, these photos might have been snapped back in '42, or even earlier. The Ford's dash is filled with a complement of Stewart-Warner gauges. Note the one-piece hood top, carefully louvered. In addition to being a real looker, the white-topped roadster (convertibles have side windows)—holds several strip records.

Rods & Customs in Miniature

DRAGGIN'

Photos courtesy William Haynes



ROD & CUSTOM brought to hot rodders everywhere, last October, the first word of a brand-new hobby — one which combined actual driving ability with model building; and the result is a year-round source of pleasure since all the action takes place in-doors. Called rail racing, the hobby started in England then spread quickly to Canada, Australia and now the US. In the course of our initial report we hinted that it might be feasible to build a drag strip rather than a twisting road course, since the enthusiasts in this country are hep to straightaway acceleration trials and don't necessarily dig sharp corners. So it comes as no surprise that this country's leading rail club, the Model Auto Racing Association rushed a drag course to completion. Here's an insight into how the track and cars were built, and how you could build a similar setup right in your own basement.

Now the younger set can get into the drag racing act!
Here's how to build an all-weather drag strip
right in your own home!

-To Scale

AS A FURTHER development in the hobby of rail racing, it was decided to construct an electric drag strip. Dragging of sorts had been tried with the more conventional sports-type cars, but a bona fide draggin' wagon had never before been considered.

MARA member Neil Harrison offered the use of his workshop as a site, and a basic course laid out. Lengths of HO (model railroad) brass rail were soldered to staples driven into the track surface. The top of the rails, spaced 3" from center to center, was carefully placed at $\frac{3}{16}$ ". The ground strip of the two parallel lanes was spaced $\frac{3}{8}$ " to the left of the pick-up strip.

Since only two cars would be running at a time, a small powerpack was put into service. The unit puts out 12 volts d.c. and has sufficient amperage capacity for the two cars. The leads from the unit were taped at the head of each pickup strip near the starting line. A master switch controlling the two rails ensures an equal start for both cars. The guide rail, with expansion joints (to prevent buckling during hot weather) of $\frac{1}{16}$ " requires small length of fine wire as jumpers to carry the current between sections. The return is spiked down and soldered at each joint.

With the experimental track completed, numerous runs were made with existing road racing cars; it soon became obvious that special chassis were required. Front wheel drive, for in-

stance, which works so well on road racing, lacks the traction necessary for strip running. Even so, traction is somewhat of a problem as excessive wheel slippage can cause a lost race. A wide range of wheels are made by Veco, available at hobby stores, starting at $1\frac{1}{4}$ " and running up to $1\frac{1}{2}$ " diameter. The various tire sizes proved to be interchangeable with one hub size so one car can try several skin sizes for best running on a particular course.

The chassis itself was dictated by the available bodies. Revell's jalopy kit has become a "standard" for dragging since it can be produced in a variety of forms — chopped, channeled, sectioned, etc. Chassis width was effectively reduced by placing the Pittman motor on edge — raising the car's center of gravity, but no curves are negotiated. A flat brass plate acts as a motor mount. The side members are brass tubing with the motor mounting plate soldered to them. A solid axle turning in a brass tube bearing is used in front, with the bearing mounted on top of the frame rails. Rail guides and insulated pick-up are mounted on the rear axle tube. Individual tubes are cut for bearings for rear axle drive (see accompanying photos). Gears are generally sweat soldered to the axle at its center. Worm gears work out well, and the 10-1 ratio sets offered by Precision Model Engineering of England prove ideal. At the risk of giving away speed

(continued)

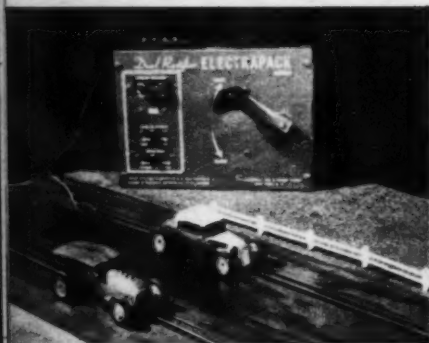
DRAGGIN'—to scale continued

secrets, the cars shown run 5-1 and 10-1 worm gears. The radical bevel gear car shown (3-1 ratio) is still undergoing experimentation.

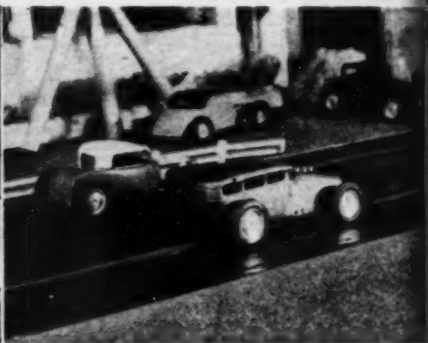
The proven Pittman electric motors work out extremely well for both drag racing and road running.

With the essentials taken care of, the track was finished off. Grass, from a model railroad store, was laid down beside the lanes. The lanes themselves are painted flat black. Tape forms the center dividing line and the start and finish marks.

(continued on p. 65)



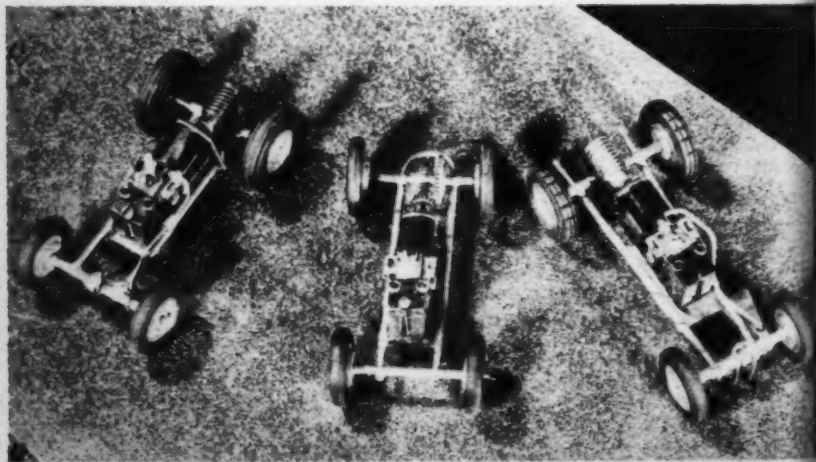
A coupe and a sedan pair off on the scale Michigan drag strip. Controller in background electrifies both tracks so the cars are started—under full throttle—simultaneously. The extremely fast speeds reached are fantastic.



Half way down the strip the sedan has the edge over the coupe. Better traction and weight distribution paid off leaving chute. But the miniatures are subject to the same physical laws as full size dragsters, so...

Three chassis used on the Michigan course. At left is bevel-gear driven car with a final rear end ratio of 3-1. In the center is the

frame of the roadster shown in the other photos. Notched tires aid traction. At right is the more conventional drag racing chassis.



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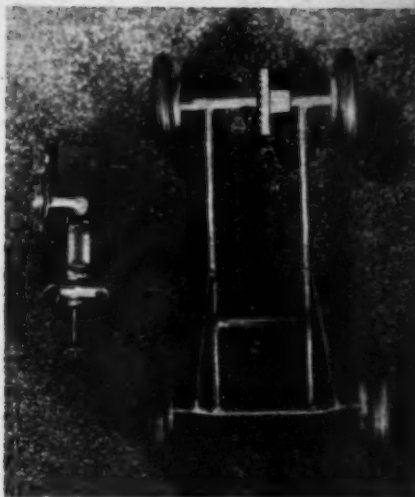
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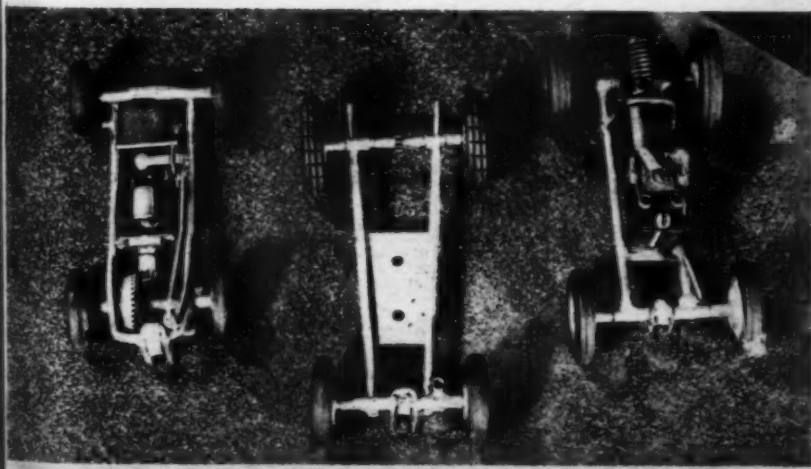
...don't be surprised if the unexpected happens. The roadster's gear ratio more than made up for the slow start as sedan is passed just short of the finish line! Experiments have proven that good chassis design is necessary.

Another look at the three chassis. Barely visible at the forward end of both left and right hand cars is a U-shaped wire. Since it straddles



Detail of drag car chassis shows lightweight construction. All tubing is brass, soldered together at the joints. The front wheels turn on an axle, but the rear axle turns in bearings. The axle gear shown gives a 3-1 reduction. Beside the chassis is the popular and potent Pittman DC60 - an HO railroad power unit.

les the guide rail, the cars are prevented from wandering off the course. The cars often fishtail wildly when leaving the starting line.



another R&C
'bird bulletin

NOSE

building



AS PROMISED in last month's 'Bird Bulletin here is the good word on lengthening the beak of our test-type T'bird. The design was dictated by the overall styling theme of the wedge, similar to better known Chrysler dream cars. The detailing and adaption of the theme to our 'bird was carefully worked out by staffer Lynn Wineland and soon the feathered Ford was chirping at the doors of Burbank's Valley Custom Shop. No long discourse is needed to laud the abilities of Clayton Jensen and Neil Emory, the emulation of whose abilities is the goal of many in their profession. Let it suffice to say that there are none better, hence the

choice of their shop to perform the deeds herein described.

At the right is one of several drawings given to the metalmasters as a guide during the surgery. The faithful reproduction in metal is evident in the sequence on this and following pages.

For ideas used in this month's series we are indebted to readers Frank Fry, Jerry Scollard, Dick Dagdigian, Ray Scroggins and T. G. King.

We're still looking for ideas about the rear end, so if you get a notion about shaping the tail feathers of our 'bird... WRITE! Hm? OH! - Auto Suggestion c/o R&C, 5959 Hollywood Blvd., Hollywood 28, California. GO! ●

Bumper, trim are removed and wire mock-up is made to simulate shape of completed scoop nose.



E NEWS

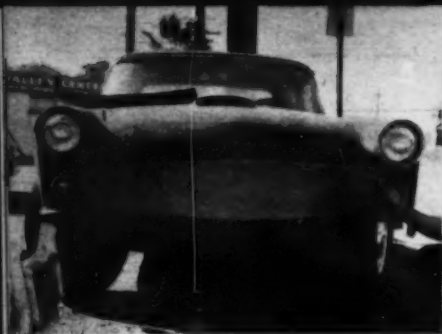
is good news

a new beak for a 'bird



Cardboard templates are cut to form dictated by wire sculpture, measured carefully to avoid error.





Template shows shape of radius around intake opening is not unlike the stock 'bird mouth.



18 gauge sheet metal was rolled to general desired shape before being tacked in place.



... in panels is not the easy job that it might seem at first thought. Compound curve is necessary to avoid concave look or simple roll could be employed. Templates assure that same shape occurs all across panel. Compound curve is easily seen in photo (9) at left. Boards hold work.

With lower sections welded together to form slight peak at front, final shape to center of top piece is put in by hammering down the welds and softening the sharpness of the peak. Bottom will be treated in same manner. Corners of old grille panel hold front end in shape until the ends of new nose are formed then cut away to save weight.



New roll is hammered and drolled in edge of opening. Pan has been added below old splash guard location to finish off lower front corner of fender, but still ...

... needs lots of splitting, shaping and welding to pull corner in parallel with mouth opening of new nose. Despite protests from many quarters, the stock 'bird park lights are ...

ROD & CUSTOM

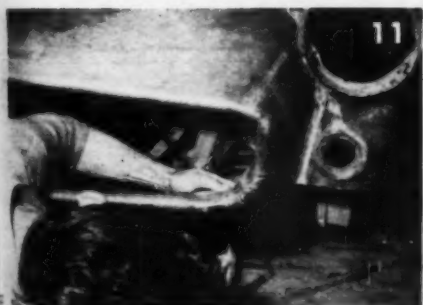
6



Old panel was cut away and braces (arrow) support new section. Forming radius (8)...



10



Nose takes shape as ends are formed to join upper and lower panels. Lots of heating and hammering is necessary here to shape metal to desired form. Welds will be hammered.



Working around to the corners of the front fenders, Neil trims off the flared edge and raises the wheel opening to its new height. The body line is now tangent to the well.

15



...retained. Bezel of small light perfectly complements Continental Mk. II headlight ring whose adaptation was described last month. Vastly reworked area at front edges of...



... 'bird show' in photo above which was taken before welds were hammered into flawlessly smooth panels that Valley Custom is noted for. (continued)



Smoothing out the junction of the nose and fender front, raw edges are rolled back to lines. Front view appears very slim for wedge appearance dictated by contemporary styling.



Wheel opening is swept back with about six inches added to its length. Line of well now parallels leading edge of duct in front fender panel used for engine cooling. Next step...



Photo above fails to indicate extremely low appearance gained by lengthening nose, due to the fact that the engine and all removable gear from front end were out during modifications, causing the nose to sit several inches too high. Detail of the headlight inner fairing is in the picture at the right. The principle is applicable to many cars.



six
now
under
...

...is hammering all welds, annealing metal for permanent security against cracked panels. Very little lead was used. Only where intersection of hidden bulkheads comprising...



...underlying structure made hammer welding impossible. Finally a quick prime coat is tossed on so the 'bird can be photographed. More work follows building grille and inner panels:



d by
rable
nose
hiring
cars.
TOM

MARCH, 1958

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(State size of Wheel)



PINSTRIPING

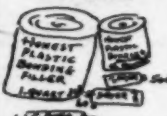
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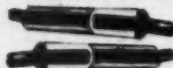
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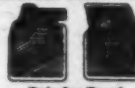
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Give Wheel
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Open to Men & Women

Membership Only \$3 a Year



Chopped Merc was ready for delivery to customer when fire struck at Barris Kustoms in So. Calif.

FIREMAN SAVE MY CUSTOM!

well-known flame jobs go up in smoke

YOU WON'T see the *Dream Truck* in these photos, but it's only because Lady Luck was with us. A burned-out transmission bearing delayed delivery of our famed ½-ton pickup to Barris Kustoms where, after a one-day car show in the neighborhood, the hauler was slated for new alterations in preparation for a dozen forthcoming displays. As it turned out, the transmission was not repaired until a Wednesday — and on Thursday when the driver reached the Lynwood, Calif., shop, the sight shown here greeted his eyes.

The well known shop — and 12 of its customized cars in various construction stages, caught fire when electrical wires shorted out during the night. When sparks reached the paint area — blooie! Up it went. Lost are Archie Moore's \$25,000 magnesium-bodied Jaguar, a new Imperial just readied for an oil company president, a '57 Bird in for a paint job, Jayne Mansfield's Jaguar roadster, a newly completed top-chopped Merc, assorted street roadsters and Dean Jeffries' adjoining striping emporium. Other publicized cars — Barris' Kopper Kart pickup among them — were fortunately yet in shipment from an Oregon show.

ROD & CUSTOM • MARCH, 1958



Famed pickup "Wild Kat," totally destroyed, rests near shop door. At right, two onlookers discuss the ashes of Archie Moore's Jag.



Above: among the 12 cars destroyed were a '57 Bird, nearly finished roadster, a new Imperial. Below: front shot of Merc at top of page had diagonalized quad lights. Note lead melted from front edge of the hood.





NINE YEARS AGO few people would have guessed that the '49-'51 Ford body styles would become lastingly popular, but as time passes and the cars stay in the customizing spotlight it is becoming evident that Ford did it again. So it was with the T, the A, the '32, the '36, the '40 and, to a lesser extent, the '41. An outstanding example is shown on this month's cover, and here is another interesting one — this time embodying alterations within the capabilities of us all.

Bob Liebhart, of Windsor, Pennsylvania, lists 8 points of interest in his letter to us. Filling the number 1 spot; trunk and hood are filled in using fiberglass. 2 — body seams and side trim holes filled, also with the plastic. 3 — '52 Mercury headlight rims were used in frenching the sealbeams. 4 — Conservative tailfins — of fiberglass — were mated to the Ford metal with still more fiberglass. 5 — Doors operate via '46 Lincoln pushbuttons. 6 — Another Merc was robbed, this time '53 grille teeth were planted in the scoop-like edge of the rear fender skirts. 7 — Grill spinners from the car were bolted to '56 Ford hubcaps to create novel wheel covers. And 8 — the owner did all the work himself using TapKits (*Sneaky commercial, wasn't it*). Looks to us like a good job on a nice car by an owner unafraid to tackle his own customizing project. ●





By GEORGE BURNLEY

As safety inner tubes are notoriously slow to deflate, this chore may be hastened by removing the valve core and sucking the air out with vacuum from the windshield wiper hose or a simple hook-up to the oil draining machine at your nearby garage.

• • • • •

Sometimes, during body and fender repair, a piece of chrome moulding trim has a slight dent or bulge. Rather than spend money for a new piece or spoil it by awkward "dinging," try this little trick:

As closely as possible to the dented part, block off a short channel in the under side of the moulding with wet rags or putty. Then pour in molten lead. When cool, remove the rags or putty and tap the makeshift "dolly" along to straighten the dent. It may be left in place or carefully melted out again with a torch.

• • • • •

KLUBKOOP'S WEEK

continued from p. 31

I don't go with Gertrude Geester anymore. In fact, I've moved my shop to Pismo Beach where I found a nice, stupid (and underweight) redhead with whom I go steady. Once in awhile, I sneak down to Los Angeles and have a cup of coffee with old Doodles. And, whenever we talk about my adventure with near-disaster in the form of that piano-legged, moustached witch, Gertrude Geester, and her crummy stock Ford—I always tell my inklinging buddy: "It all goes to prove, man, you sure can make a silk purse out of a pig's ear—providing you got a silk pig to start with!"

We call this *The Klubkoop Law of Logic*.

What else? •

MARCH, 1958

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HOPPING UP NEW V-8's

continued from p. 23

would want to run above 5500 rpm
 even with solid lifters and heavy-duty
 valve springs. Those light tubular
 pushrods that come with the better
 cam kits would be especially important
 here...and you might even consider
 magnesium rockers when and if they
 are available. (Admittedly, I have
 never been very convinced of the effec-
 tiveness of these on most engines.) And,
 of course, the standard Ford cam does
 not appear to be any "super-race"
 grind, so I would think a complete kit
 of cam, solid lifters, pushrods, and
 springs would be real effective here.

Intake manifolds are going to be a
 problem. To save iron on this new
 engine the cylinder head castings no
 longer extend inward to surround the
 pushrods; instead the pushrods pass
 up through holes in the intake man-
 ifold, and the rocker covers fasten to
 the heads along the outside and the
 manifold along the inside. (The mani-
 fold also acts as the cam chamber
 cover.) This casting is very massive,
 and it's bound to cost plenty for the
 speed equipment men to produce in
 two and three-carb aluminum versions.
 Furthermore, there will be no optional
 factory multi-carb setups available.
 Fuel injection will be hard to adapt
 here. So expect your fuel feed prob-
 lems to be expensive and complicated
 on the new small Ford engine.

Fortunately the engine has plenty of
 cubic inch potential. The cylinder walls
 look good for a 1/4" bore increase, and
 rod clearance looks good for a 1/4"
 stroke boost. On the 361 Edsel version
 this would yield no less than 450 cu.
 in. Of course, if the inches can't
 breathe, what good are they?

LARGE FORD

On paper the big 430-cu. in. Ford
 Motor engine (used in Lincoln and
 senior Mercurys) looks like the answer
 to the souper's prayer. The flared-out
 con rod shanks would limit any stroke
 increase to around 1/4"; but this stroke
 and the usual 1/4" bore increase would
 cough up nearly 500 cu. in. Even if the
 actual output per cubic inch figures

ROD & CUSTOM

aren't so good, surely this rig would just about have to show more than 400 horses on gas, and 500 or so on fuel, if given the full treatment. Biggest disadvantage of this new engine is that it's just plain big. It's close to the size and weight of the '52-'57 Lincoln — which means around 750 lbs. It's certainly an engineering achievement to get an extra 100 inches or so without any great increase in weight... but that doesn't help the guy who's trying to adapt this engine to a 2000-lb. sports car or track job. This will be a problem.

Otherwise the design looks pretty good. The "block wedge" combustion chamber has the block faces cut off at 35° instead of 29° like Chevy, and the relationship between chamber volume and squish area doesn't look as good on paper as the Chev design. I couldn't recommend any compression ratio above the stock 10.5:1. (Remember that the heads cannot be milled on this setup, and ratio increases have to come from either a displacement increase or changing the shape of the piston crown.) This engine has very large valves (2.09" intakes and 1.78" exhausts), but there's room for still larger ones. Looks like you could go nearly ¼" larger on both intakes and exhausts. The valve gear is very similar to the small Ford engine — heavy cast rockers and solid pushrods. This will need tubular pushrods, solid lifters, and heavy-duty springs to do anything, too. Even then I wouldn't expect to use speeds much over 5500 rpm. This is a big, big engine.

Fortunately, the carburetion problem will be simpler. A conventional intake manifold layout is used. Also, a triple 2-throat setup is used on the optional Mercury "Super Marauder" engine (400 hp at 5200 rpm), so there will be at least this reasonable-priced factory multi-carb manifold available that will fit the 383, 410, and 430-cu. in. versions. When the California suppliers will be out with their special manifolds and cams depends entirely on demand. Don't forget that this will be a low-production engine. There never was very much available for the earlier Lincoln ohv V-8.

We'll see. ●

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OUR READERS WRITE —

continued from p. 9

oldsters. Let's not make a one-sided thing out of what looks as though is becoming a new national hobby.

(name withheld at writer's request)

• Sure as shooting the average American tinkerer is going to improve or at least alter nearly any product that meets his fancy. So it has been with the automobile (hence the popularity of automotive magazines) and numberless other contrivances. And so it will become — with or without our help — with the tiny cars that are fast catching on all over the country. Our participation in the building of a competition machine is intended to assist those who would build a racing model anyway. We are just as strongly for the individual owner who asks nothing more than that his car be more comfortable than stock (our Automart column includes upholstery for the little monsters), or look different than its brethren (also in this month's Automart are such items as steering wheels, etc.). If you'll examine our 2-part article closely, Mr. withheld, you'll observe that all of the chassis improvements noted are for safety reasons whether they are carried out on a stocker or racing model. Let's just accept things as they are — we'll overlook your inferences and you, in turn, can skip the pages 36-37. O.K.?

ROD & CUSTOM

DRAGGIN'—TO SCALE

continued from p. 47

In order to bring some sort of order to the sport, the MARA offers a tentative set of rules so all fans could compete equally at any given course. Cars:

1. Bodies will be mandatory, preferably with a recognized prototype.
2. Wheelbase shall not exceed $3\frac{1}{4}$ ".
3. Tread shall not exceed $2\frac{1}{4}$ ".
4. Gearing and ratios are up to the builder.
5. Wheel diameter shall not exceed $1\frac{1}{2}$ ".
6. Motor shall be any HO size of any make.

Track:

1. The guide rails shall be exactly 3" apart.
2. Return strip will be spaced $\frac{1}{8}$ " to left of guide rail.
3. Guide rail will be $\frac{1}{16}$ " in height.
4. Ten actual running feet will be the minimum running length.
5. Power will be 12 volts d.c.

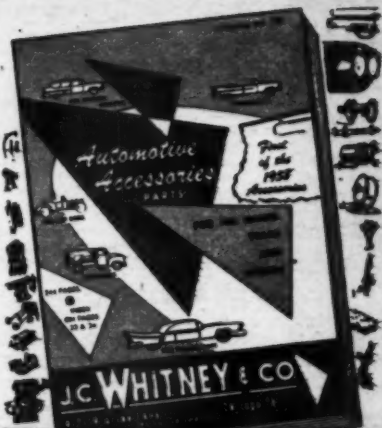
The project outlined has many things for the enthusiast. The entire layout, cars, track, bodies, etc., are made from materials and parts available almost anywhere—with the exception, perhaps, of the gearing. Very little space is required, and by exercising a little ingenuity the cost can be held to a modest sum.

It is hoped this project is of interest to hot rodders everywhere—and what a delightful club project for those whose full-size drag strip is feet-deep in snow!

The Model Auto Racing Association's President, Mr. Thomas Cook, can be reached by writing the MARA at 1127 Staples Ave., Kalamazoo, Michigan. Those interested in this project, or building one of their own, are invited to contact Mr. Cook.

Remember that your nearest hobby store is the best source for supplies and materials. It is requested that neither the MARA nor R&C Magazine be contacted in connection with the attainment of parts and supplies.

Further articles on electric rail racing will soon be forthcoming. ●



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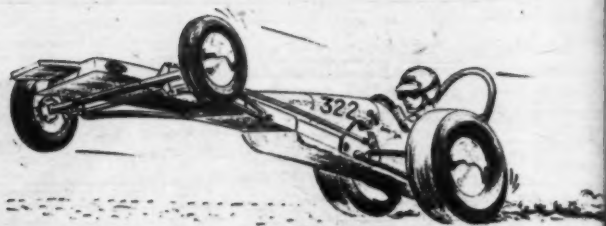
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backpressure



ELSEWHERE IN this issue we discuss the all-new Chevrolet, Ford, and Chrysler engines for '58. I'd like to mention a few words here on the performance options available on engines which are *not* new for '58. As you know, the AMA anti-race ruling last June killed the production of the factory racing equipment, and it was expected that it would have a big influence on showroom power packs. Fortunately it hasn't had much of an effect in the latter case.

In the case of Buick, they never did offer a regular power pack, and they don't this year; but their special racing cam kit is now a thing of the past. Cadillac has switched from dual quad carburetion on the "Q" (Eldorado) engine to *triple two-throats*; the setup is optional on all models. Either manifold can now be used with earlier Cad heads. The same power options are available as in '57 on the 283-cu. in. Chevrolet engine — 4-barrel carb, dual quads, fuel injection, Duntov cam, and 10.5:1 pistons. However, I understand the "competition" engines with dual quads and Duntov cam cannot be ordered in a sedan this year. No announcement has been made on a '58 Chrysler 300 series as this is written; but it will undoubtedly be offered later — probably with the same dual quads and cam setup used last year.

Oldsmobile continues to offer the J-2 Rocket engine with triple two-throat carburetion, but without thin head gaskets for higher compression. The "J-4" engine with the racing cam kit is no longer available. The standard Plymouth engine this year is based on the earlier 318-cu. in. Fury block. Power options will include dual exhausts, a 4-barrel carb, dual quads, dual-breaker distributor with special spark curve, and an improved long-duration cam. (All this is standard in the Fury — and, of course, the new 350-cu. in. V-8 will be optional in all lines.) Pontiac will continue to offer triple two-throat carburetion (along with 10.5:1 gaskets when installed at the factory), and fuel injection will be available on any Hydramatic model this year. Studebaker and Packard will continue to offer a 4-barrel carb and dual exhausts as their power pack for standard '58 models. The large Hawks, of course, have the McCulloch supercharger.

Most significant new development in this field of factory optional performance equipment is the trend to triple two-throat carburetion. Chevrolet, Mercury, and Cadillac have now joined Olds and Pontiac. Actually, triple two-throat carburetion is inherently *cheaper* than dual quads... but there's more to it than that. Throttle response is better with the progressive linkage, fuel economy is better, you don't get the fuel starvation on turns — and they just seem to give more horsepower and torque. Apparently another case where the California speed equipment boys showed Detroit how! ●

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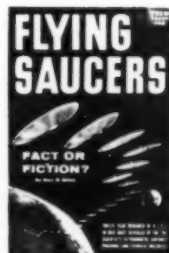
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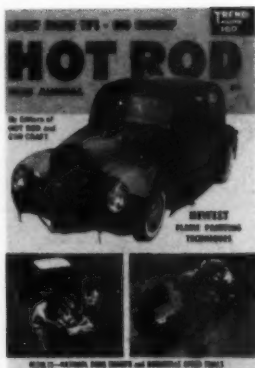
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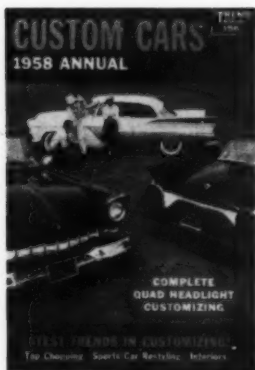
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